

The Little South Fork Cumberland River at Freedom Church Ford is approximately 20-25 m wide. Except for its clear, cold water, it does not assume headwater characteristics described as typical habitat for *Pegias*. While riffles are present in the area where *Pegias* was collected, there are extensive reaches of pool areas. All *Pegias* specimens were collected from the transition zone at the tail of a long sluggish pool just at the point where water velocity suddenly increased (about 0.2 m/sec) to enter a turbulent riffle below. Water depth averages about 20 cm at low river stages. Substrate was predominately dark sand with scattered small gravel. *Pegias* occurred either partly buried or on the substrate with only the foot penetrating the sand. The periostracum of all individuals had been largely eliminated, apparently from the abrasive action of sand in the current-swept habitat. Similar massive erosion was noted on all specimens examined from several other localities (University Michigan Museum of Zoology, 70152, 23144, 23151, 58872, 105467, 29085, 105469 through 105477). In close association with *Pegias* were *Ptychobranchnus subtentum* and *Corbicula manilensis*. Occurring elsewhere in the riffle were *Ptychobranchnus fasciolaris*, *Elliptio dilatatus*, *Medionidus conradicus*, *Villosa iris*, *V. taeniata*, *V. vanuxemi*, *Lampsilis fasciola*, and *Fusconaiia subrotunda*.

Additional *Pegias* valves have been collected at Ritner Ford 3.2 km upstream from Freedom Church Ford [WCS CU/BS-1 (2)] indicating that the Little South Fork population is widespread in riffle areas of the river. The Little South Fork originates in Pickett County, Tennessee, and stretches some 41.6 km along the Wayne/McCreary County line in Kentucky to its confluence with the Big South Fork Cumberland River. Considerable additional habitat may be extant upstream from Ritner Ford. However access to this area is limited and it has not been assessed thus far. The Little South Fork is perhaps the most pristine stream remaining within the entire known range of *Pegias* in the Cumberland and Tennessee drainages.

While analogous habitat occurs in the Big South Fork Cumberland River, additional populations are not expected there. In recent years, increases in coal surface mining has increased siltation

and decreased water quality to the point that the mollusk population is declining rapidly and will perhaps soon disappear.

The discovery of a substantial and perhaps the healthiest, population of *Pegias fabulain* the Little South Fork Cumberland River constitutes a significant addition to the known distribution of this rare mollusk. If the Little South Fork, which is designated a Kentucky Wild River, continues to enjoy protection from strip mining and other perturbations, its mussel population should be afforded continued preservation. This suggests that perhaps the status of *Pegias* should be regarded as threatened rather than endangered.

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#### *DISTORSIO KURZI*, A NEW CYMATHID GASTROPOD FROM THE CENTRAL PHILIPPINES

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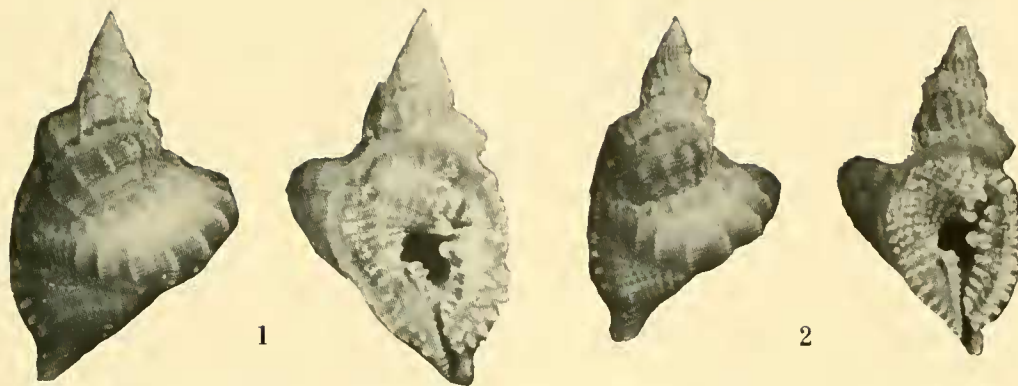
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Over the last few years there has been increased interest in commercial shell collecting in the deeper waters of the central Philippines. This



FIGS. 1-2. *Distorsio (Rhysema) kurzi* new species. 1, Holotype, USNM 783780, off Balicasag, Bohol Island, Philippines, in 120-150 meters (1 ×). 2, Paratype, USNM 783931, same locality and depth (1 ×).

has brought to light many new and unusual species from previously unsampled offshore communities. Among these is a new Cymatiidae species of *Distorsio* described herein.

*Distorsio (Rhysema) kurzi* new species

Figs. 1 and 2

*Description:* Shell to 56 mm; spire angle 45°-50°; protoconch with 2 whorls, smooth, glassy; teleoconch with 7-9 whorls; first 4 whorls conical; beginning with 5th whorl there is a swollen bulge with the parietal shield 180° in apposition, unit arrangement repeating every 270°; shell strongly sculptured with beads or ribs at intersections of spiral cords and axial ribs; spiral sculpture consists of 1 major cord at the suture, 1 at the sharply angled shoulder (comprising 8 coalescing threads), 5 major cords below the shoulder, and 4 or 5 on the siphonal canal. Shell color deep golden brown with darker brown bands at the shoulder and the suture; parietal shield thin, lenticular, coffee to orange-brown in color, with white denticulations; 8 denticles on inside of outer lip; anterior 5 produce white denticles on outer lip with white chevrons between; 6th denticle greatly enlarged, protruding into aperture opposite corresponding indentation in columella; 13-16 white denticles on columellar side of siphonal canal below the indentation.

*Type material:* Holotype — United States National Museum (USNM 783780), length 51 mm;

paratypes in the United States National Museum, Washington, D.C. (USNM 783931).

*Type locality:* Off Balicasag, Bohol Island, Philippines, in 120-150 meters.

*Range:* Known only from the type locality.

*Discussion:* This new species is a component of the lower continental shelf communities that surround the deep water pockets between the islands of the central Philippines. *Distorsio kurzi* most closely resembles the Japonic *D. constricta habeii* (Lewis, 1972:38-44, figs. 38, 39) but differs primarily by having a sharply angled shoulder that produces the characteristic pronounced humps. The new species is more darkly colored than *D. constricta habeii*, being consistently golden brown, with a darker mid-body band, brown parietal shield and outer lip, as opposed to the pale-tan to white body color and white parietal shield of *D. constricta habeii*. The number of denticles on the columellar edge of the siphonal canal also consistently differs between the two species; 8-12 in *D. constricta habeii* and 13-16 in *D. kurzi*.

The new taxon honors Richard M. Kurz, Wauwatosha, Wisconsin, who first recognized the species as new and donated the type material.

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- Lewis, H. 1970. Notes on the genus *Distorsio* (Cymatiidae) with descriptions of new species. *The Nautilus* 86:27-50.